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EXAMINER

ROSENBERG, LAURA B

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/692,217	Applicant(s) ULINTZ, PETER J.	
	Examiner Laura B. Rosenberg	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/23/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 9 and 21 are objected to because of the following informalities:
"the surface area" should be changed to --a surface area-- (claim 9, line 1);
"and outer jacket" should be changed to --an outer jacket-- (claim 21, line 2).
Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 1, it is unclear if "a longitudinal axis of the sleeve" (lines 12-13) is the same as "a longitudinal axis of the sleeve" (lines 15-16). If this is the same feature, the examiner recommends rephrasing the second mentioning of this feature to read, "the longitudinal axis" or "said longitudinal axis".

With respect to claim 11, it is unclear if the applicant is attempting to define a feature of the claimed invention through a method step with the phrase "the second end of the inner jacket inserted into the outer jacket through the distal end of the outer jacket" (lines 3-4). It is also unclear if the applicant is intending to claim a configuration in which a lower end of the inner jacket (referred to as "second end" in the

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specification) is engaged at a lower end of the outer jacket (referred to as a "second end" in the specification), or if this portion of the claim is a simple grammatical mistake. The drawings and the specification set forth an inner jacket that is engaged at an upper end (referred to as a "first end" in the specification) with a lower end of an outer jacket (referred to as a "second end" in the specification). Based on the specification and the drawings, the examiner has assumed that the configuration of claim 11 is similar to that of claim 1, in which the upper end of the inner jacket is engaged at the lower end of the outer jacket via the sleeve member.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5-13, 15-24, 26, and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Milton et al. (3,703,105). Milton et al. disclose a telescoping steering column assembly (including #10, 12) comprising:

- Outer jacket (including #52) with a first end (for example, to the left in figure 3) and a second end (for example, to the right in figure 3)

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- Inner jacket (including #50) with a first end (for example, to the left in figure 3) and a second end (for example, to the right in figure 3), the first end of the inner jacket dimensioned to be received telescopically within the second end of the outer jacket (best explained in columns 6-7; best seen in figures 2, 3, 5, 6)
- Sleeve (including #54) having a wall (best seen in figure 4 as portion of #54 that does not protrude) and positioned inside of the outer jacket at the second end of the outer jacket (best seen in figure 3), the wall being spaced from the inner jacket and outer jacket (via protrusions; best seen in figure 4)
- The first end of the inner jacket positioned within the sleeve inside the outer jacket (best seen in figure 3)
- The assembly configured for telescoping movement between the outer jacket and the inner jacket with an outer surface of the inner jacket in contact with the inner surface of the sleeve and an inner surface of the outer jacket in contact with an outer surface of the sleeve (best explained in columns 6-7; best seen in figures 2, 3, 5, 6)
- The inner surface of the sleeve which contacts the outer surface of the inner jacket is located on at least one internal rib (for example, including #86, 92), which protrudes from the wall of the sleeve and is aligned with a longitudinal axis of the sleeve (best seen in figure 4)
- The outer surface of the sleeve which contacts the inner surface of the outer jacket is located on at least one external rib (for example, including #88, 92), which protrudes from the wall of the sleeve and is aligned with a longitudinal axis of the sleeve (best seen in figure 4)

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- An internal rib is offset from an external rib (all are offset except external ribs #92 that are aligned with internal ribs #86)
- At least one biasing rib (for example, #92) on an exterior of the sleeve wall, which is radially aligned with an internal rib (for example, #86) of the sleeve (best seen in figure 4)
- A width dimension (or surface area) of an internal rib (for example, #86) of the sleeve is greater than a width dimension (or surface area) of an external rib (for example, #92) of the sleeve (best seen in figure 4)
- A combined thickness dimension of the wall of the sleeve, at least one internal rib, and at least one external rib is at least equal to a distance between the outer surface of the inner jacket and the inner surface of the outer jacket (best seen in figure 4)
- Plurality of internal ribs (including #86, 92) protruding from an interior of the sleeve wall at radially spaced locations (best seen in figure 4)
- Plurality of external ribs (including #88, 92) protruding from an exterior of the sleeve wall at radially spaced locations (best seen in figure 4) and radially offset from the radially spaced internal ribs (specifically, #86 and #88 are radially offset from each other, and #92 and #92 are radially offset from each other)
- The wall of the sleeve is flexible between the outer surface of the inner jacket and the inner surface of the outer jacket (column 5, line 60-column 6, line 7)
- A segment of the sleeve (for example, flange #94) extends past the distal end (second end) of the outer jacket (best seen in figure 3)

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- Outer jacket is fixed, the sleeve is secured to the outer jacket, and the inner jacket is able to telescope relative to the outer jacket and sleeve, alternatively the inner jacket is fixed, the sleeve is secured to the outer jacket, and the outer jacket and sleeve are able to telescope relative to the inner jacket (column 6, line 55-column 7, line 15)
- Sleeve is made of a material which is relatively more flexible than a material from which the inner jacket and outer jacket is made (for example, inner and outer jackets are made of metal, and sleeve is made of flexible plastic or elastic)
- A thickness dimension of the wall of the sleeve is greater than a thickness dimension of the internal and external ribs of the sleeve (for example, with respect to thickness dimension of internal and external ribs #92)

6. Claims 1, 6, 7, 11, 16, 19-22, 24, 27, 29, and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Ulintz (6,729,648). Ulintz discloses a telescoping steering column assembly (including #10) comprising:

- Outer jacket (including #12) with a first end (for example, to the right in figure 1) and a second end (for example, to the left in figure 1)
- Inner jacket (including #18) with a first end (for example, to the right in figure 1) and a second end (for example, to the left in figure 1), the first end of the inner jacket dimensioned to be received telescopically within the second end of the outer jacket (best seen in figure 1)
- Sleeve (including #22) having a wall (including portion without spherical elements #24) and positioned inside of the outer jacket at the second end of the outer jacket

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(best seen in figures 1, 4), the wall being spaced from the inner jacket and outer jacket (via spherical elements #24; best seen in figure 2)

- The first end of the inner jacket positioned within the sleeve inside the outer jacket (best seen in figures 1, 4)
- The assembly configured for telescoping movement between the outer jacket and the inner jacket with an outer surface of the inner jacket in contact with the inner surface of the sleeve and an inner surface of the outer jacket in contact with an outer surface of the sleeve (best explained in columns 5-7; best seen in figures 1, 2, 4)
- The inner surface of the sleeve which contacts the outer surface of the inner jacket is located on at least one internal rib (for example, inner portion of spherical element that contacts inner jacket), which protrudes from the wall of the sleeve and is aligned with a longitudinal axis of the sleeve (best seen in figure 2)
- The outer surface of the sleeve which contacts the inner surface of the outer jacket is located on at least one external rib (for example, outer portion of spherical element that contacts outer jacket), which protrudes from the wall of the sleeve and is aligned with a longitudinal axis of the sleeve (best seen in figure 2)
- A combined thickness dimension of the wall of the sleeve, at least one internal rib, and at least one external rib is at least equal to a distance between the outer surface of the inner jacket and the inner surface of the outer jacket (best seen in figure 2)
- Plurality of internal ribs (inner portions of spherical elements that contact inner jacket) protruding from an interior of the sleeve wall at radially spaced locations (best seen in figure 2)

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- Plurality of external ribs (outer portions of spherical elements that contact outer jacket) protruding from an exterior of the sleeve wall at radially spaced locations () and radially aligned with the internal ribs (best seen in figure 2)
- Outer jacket is fixed, the sleeve is secured to the outer jacket, and the inner jacket is able to telescope relative to the outer jacket and sleeve, alternatively the inner jacket is fixed, the sleeve is secured to the outer jacket, and the outer jacket and sleeve are able to telescope relative to the inner jacket (including column 7, lines 16-22)
- Sleeve is located entirely within the outer jacket (best seen in figures 1, 4)
- A thickness dimension of the wall of the sleeve is greater than a thickness dimension of the internal and external ribs of the sleeve (specifically internal and external ribs are only the portions of the spherical elements that extend beyond the dimensions of the sleeve wall; thus a thickness dimension of the wall is greater than a thickness dimension of the internal and external ribs; best seen in figures 2-4)

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4, 14, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ulintz (6,729,648) in view of Barton et al. (6,389,923). Ulintz does not specifically disclose the use of a bonding agent to bond the sleeve and outer jacket. Barton et al. teach a telescoping steering column assembly comprising an outer steering column member (including #1), an inner steering column member (including #2), and a sleeve (including #3) located in between the steering column members. A bonding agent (for example, an adhesive) is used between the sleeve and the outer steering column member (column 2, lines 10-18). It would have been obvious to one skilled in the art at the time that the invention was made to modify the telescoping steering column assembly of Ulintz such that it comprised bonding agent as claimed in view of the teachings of Barton et al. so as to better retain the sleeve securely within the outer tube (Barton et al.: column 2, lines 12-18).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Connell et al., Kimberlin, Beauch et al., Browne, Palfenier et al.,


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Fevre et al., Duval et al., and Jurik et al. at least disclose the features of the independent claims of the present application.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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